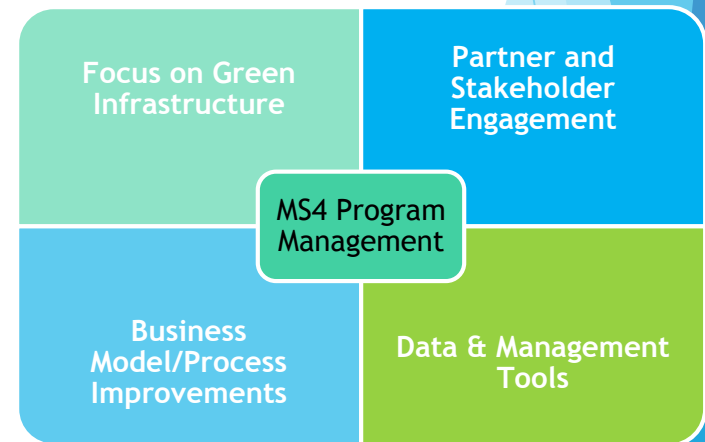


# FY17 DEP Operating and Capital Budgets

Water Quality Advisory Group  
March 28, 2016



Working together for a cleaner, greener  
economically vibrant community



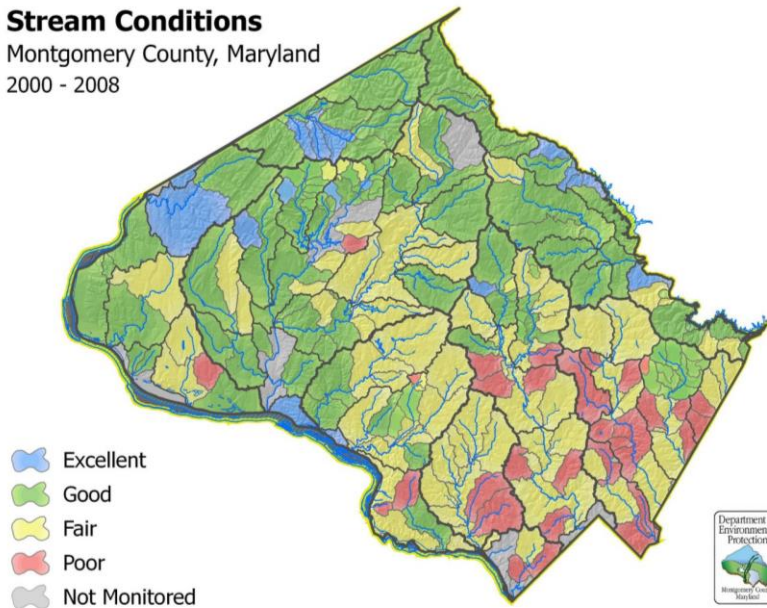
# Overview

- ▶ Progress in restoring our watersheds
- ▶ Update on progress on 2010 MS4 Permit
- ▶ FY17 Budget
- ▶ Continued Commitment to Green Infrastructure
- ▶ Moving Forward

# Progress in Restoring Our Watersheds

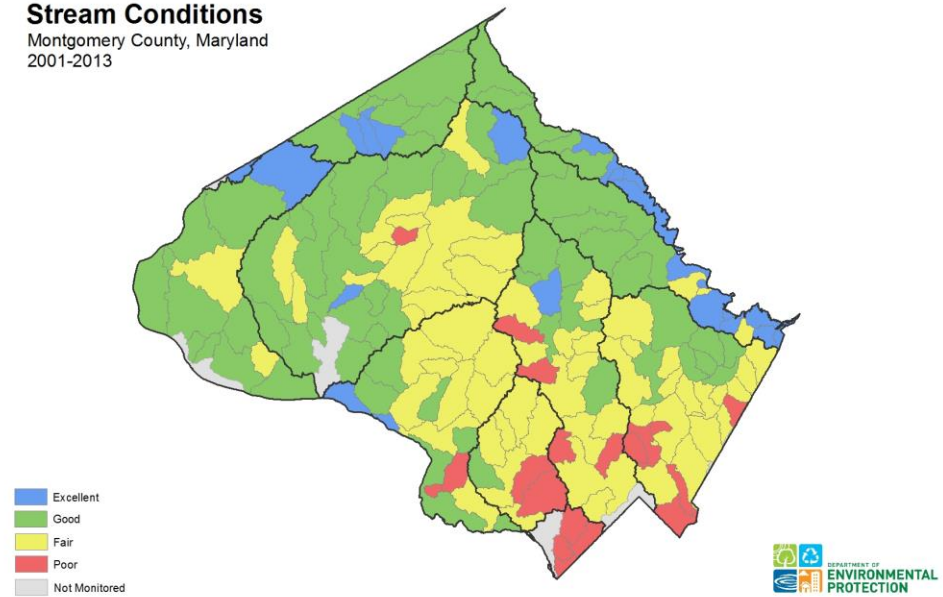
## Stream Conditions

Montgomery County, Maryland  
2000 - 2008



## Stream Conditions

Montgomery County, Maryland  
2001-2013



# Progress In Restoring Our Watersheds



*Kensington library rain garden inlet with stormdrain art*



*Kensington Library before retrofit*



*Kensington Library rain garden installed for MS4 retrofits*



# Progress In Restoring Our Watersheds

Stormwater Facilities collect trash, leaves, and sediment from stormwater runoff. This debris is removed to ensure the facility continues to function.



White Oak roadway rain garden



Roadway spallings adjacent to Dennis Ave rain gardens



Inlet to bioretention facility at McKnew Local park



Trash and debris found in stormwater facility inlet

Asphalt and concrete constantly wear off



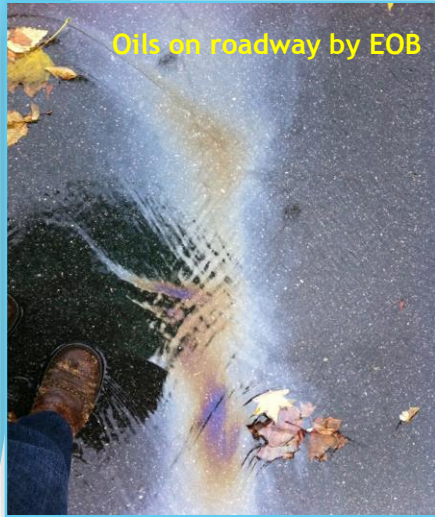
Leaves in inlet to Flora Singer ES rain garden



Grass clippings in road

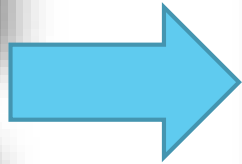
Leaves and grass contribute nitrogen and phosphorus when they don't biodegrade on soil.

# Progress In Restoring Our Watersheds



**Hydrocarbons**

Soil and plants in rain gardens capture and filter out pollutants (oils, grease, chemicals, heavy metals) and bacteria that are collected in stormwater runoff before they reach the stream



**Heavy metals scrape off every time you brake a vehicle**



# Progress In Restoring Our Watersheds



*Cigarette butts and trash in bioretention facility along Arcola Ave*



*Sediment in bioretention inlet along Lockwood Drive*



*Trash and leaves in inlet to tree box along Dennis Ave*

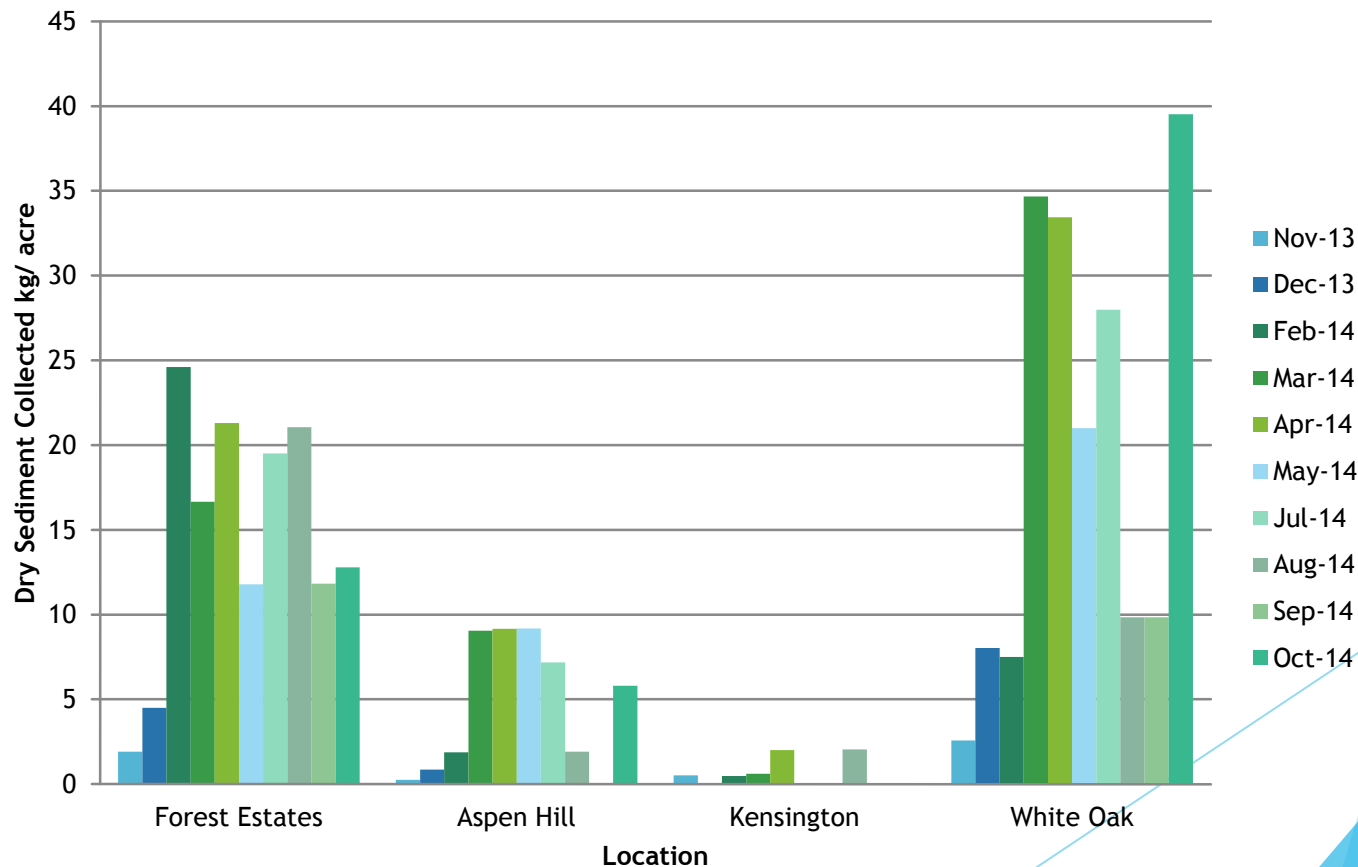


*Leaves collected from the Breewood bioswale*

*Examples of the trash, sediment, leaves, sticks, and other debris captured by our green street bioretention and rain garden facilities*

# Progress In Restoring Our Watersheds

- ▶ 2013-2014 DEP commissioned a roadway sediment study with UMD. The study found that 10,500-21,000 lbs of DRY sediment is captured in one year from inlets of 130 roadway raingardens along 4 neighborhood retrofitted with bioretention facilities. Without the bioretention facilities this sediment would have gone into our local streams.















# Update on progress on 2010 MS4 Permit

## Accomplishments to Date

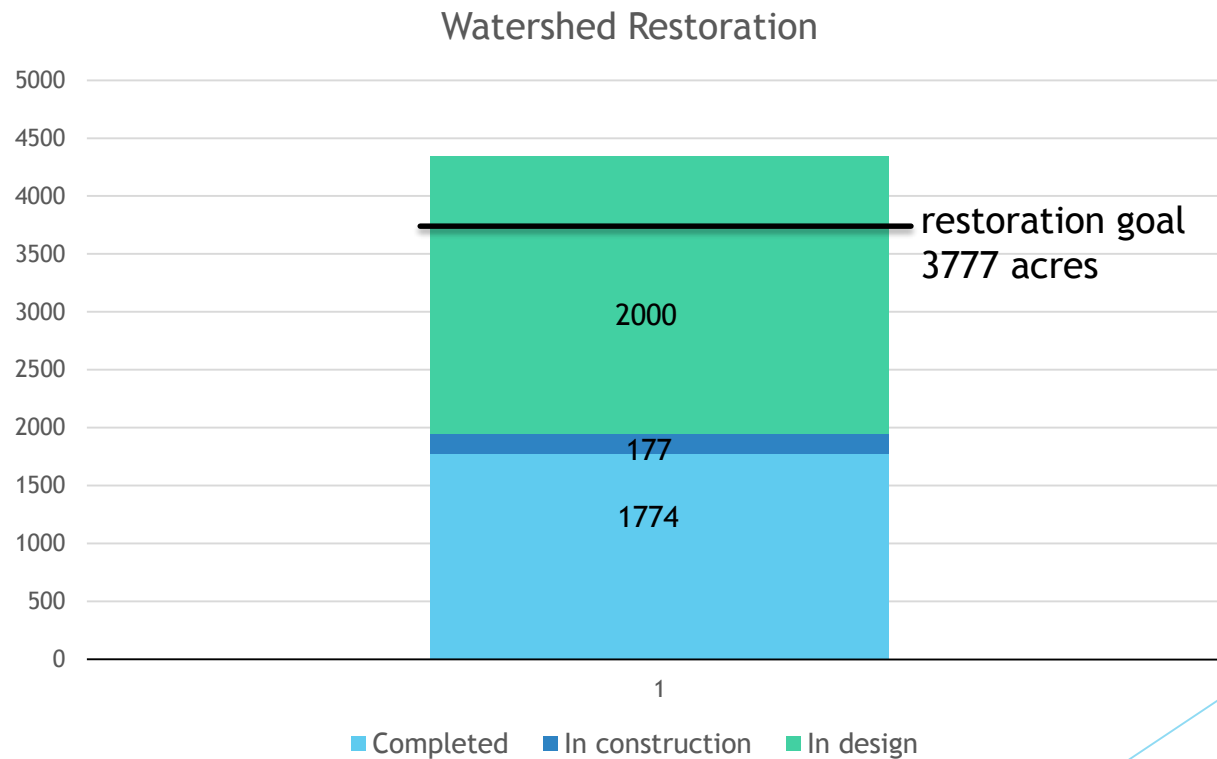
- ▶ DEP's overall commitment: Ensure that Water Quality Protection Funds are targeted to make the greatest impact in meeting the MS4 permit requirements
- ▶ DEP has made substantial progress in meeting the 2010 Permit requirements, as reflected in our draft annual report for FY14:

Permit Requirement	Compliance	Permit Requirement	Compliance
Legal Authority		Watershed Restoration	
Source Identification		Assessment of Controls	
Discharge Characterization		Program Funding	
Management Programs		Total Maximum Daily Loads	
Watershed Assessment		ESD Inspection	

 = Currently meets 2010 Permit

 = In process of meeting 2010 Permit

# Update on progress on 2010 MS4 Permit



# Update on progress on 2010 MS4 Permit

## Impervious Area Credits by Delivery Method

- ▶ 70% impervious credits are directly CIP funded
- ▶ 30% impervious credits are from agency partnerships, street sweeping, catch basin cleaning, reforestation, RainScapes, and redevelopment





# FY 17 Operating Budget

- ▶ Revenue
  - ▶ Water Quality Protection Charge (WQPC)
    - ▶ \$34.5 million
  - ▶ Bag Tax
    - ▶ \$2.3 million
- ▶ Non Operating Program Related Expenses
  - ▶ Indirect costs: \$1.4 million
  - ▶ Bond debt service: \$ 6.3 million
  - ▶ CIP facility planning: \$ 1.3 million

# FY17 DEP Operating Related Expenses

- ▶ DEP Personnel: \$5.5 million
- ▶ SWM facility inspection and maintenance: \$6.2 million
- ▶ Rainscapes: \$325,000
- ▶ Watershed Restoration Grants: \$350,000
- ▶ Street sweeping: \$231,000
- ▶ USGS gages: \$500,000
- ▶ Outreach and Education: \$205,000
- ▶ SPA Monitoring: \$170,000

# Non DEP Operating Expenses

- ▶ Storm Drain Maintenance (DOT): \$ 4.35 million
- ▶ MNCPPC: \$3.1 million
- ▶ Soil Conservation District: \$320,000








# Strategically Targeting Restoration Projects to Maximize Environmental Benefit

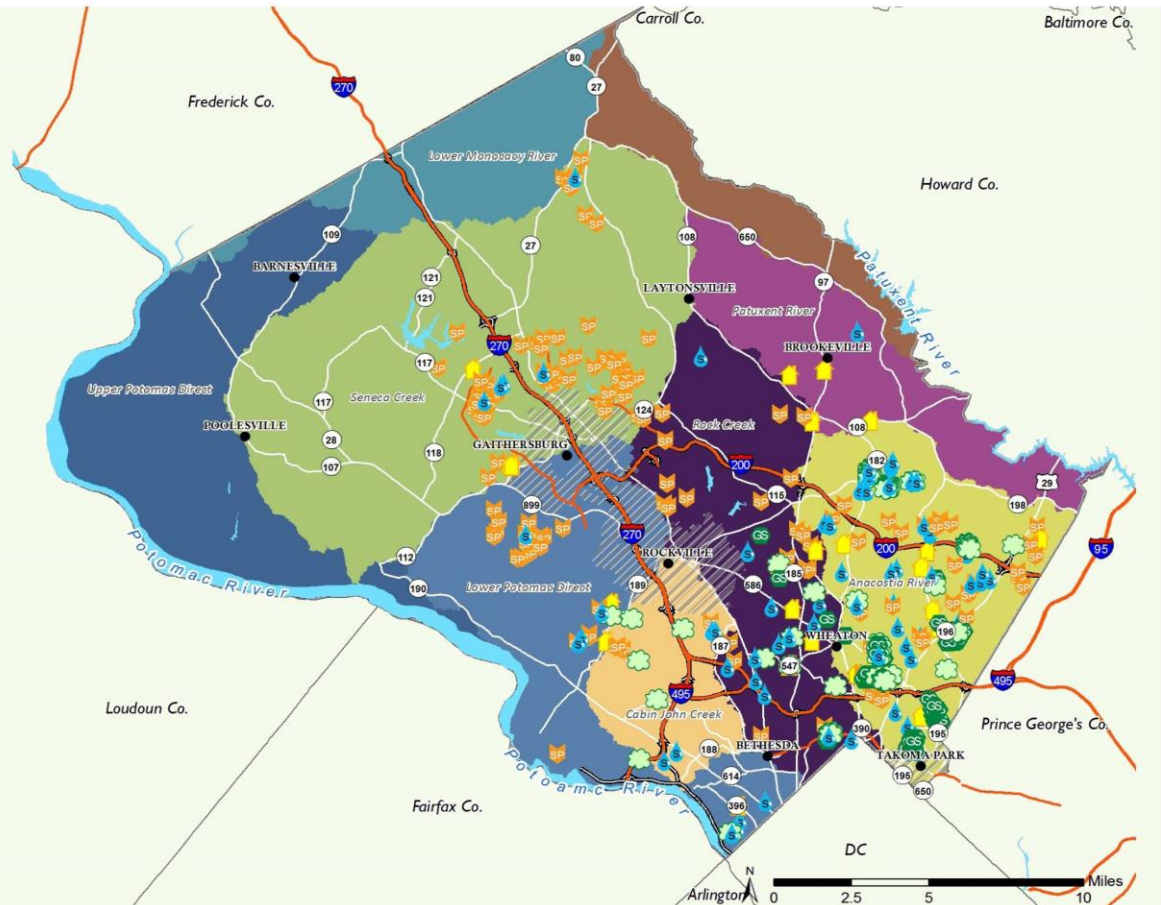
## Clean Water Green Communities

### Restoration projects in Montgomery County, Maryland



#### Restoration Projects

-  Stream Restoration
-  Government Facilities and Schools
-  Green Streets
-  Reforestation and Other
-  Stormwater Pond



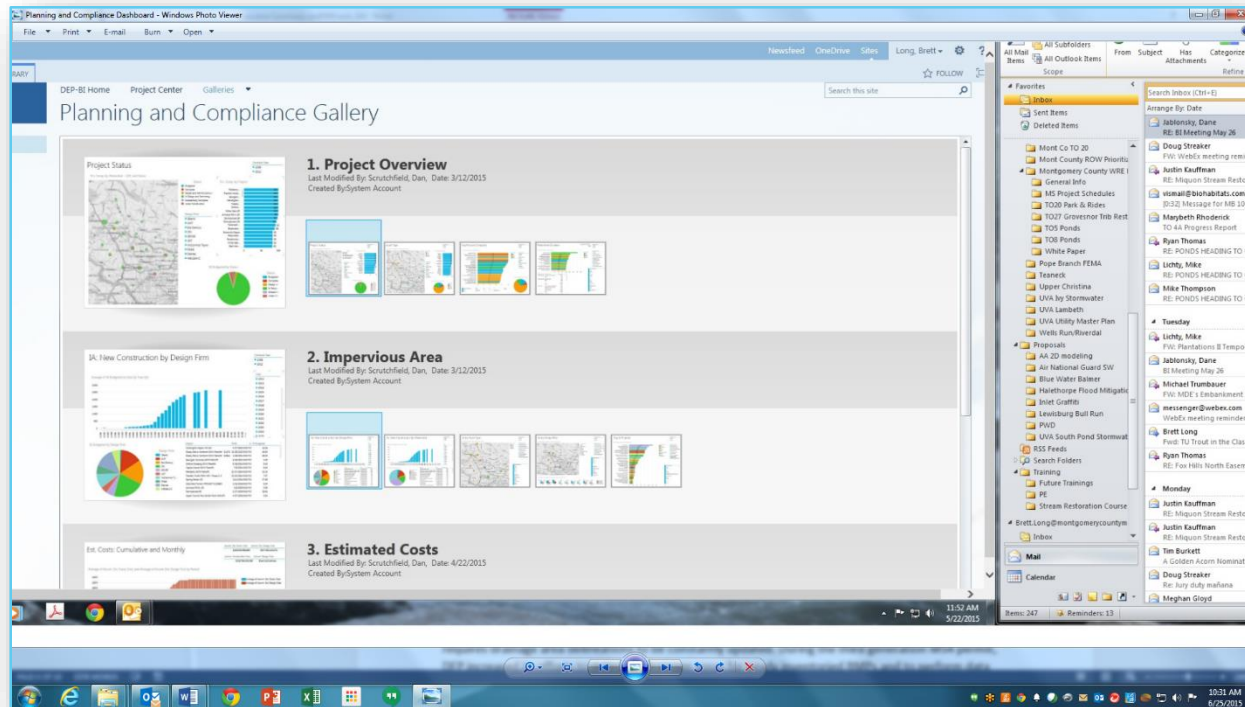
Visit our website to find a project near you at [montgomerycountymd.gov/restorationprojects](https://montgomerycountymd.gov/restorationprojects)

# FY17 CIP Budget

- ▶ Major Structural Repairs: \$4.6 million
- ▶ Government Facilities: \$3.4 million
- ▶ Roads: \$9.4 million
- ▶ Schools: \$ 2.4 million
- ▶ Misc. Stream Valley Improv: \$8.9 million
- ▶ Countywide \$21.9 million
- ▶ Facility Planning: 2.1 million
- ▶ Interagency: \$1.6 million
- ▶ Wheaton Dam Flood Mitigation: \$3.0 million

# Project Management Tools

Tool	Description	Status	Operational Date
Project Server	Critical Path Scheduler	Operational	
BI Tool	Reporting tool	Operational	
Portfolio Tool	Project Selection Tool	Beta Testing	



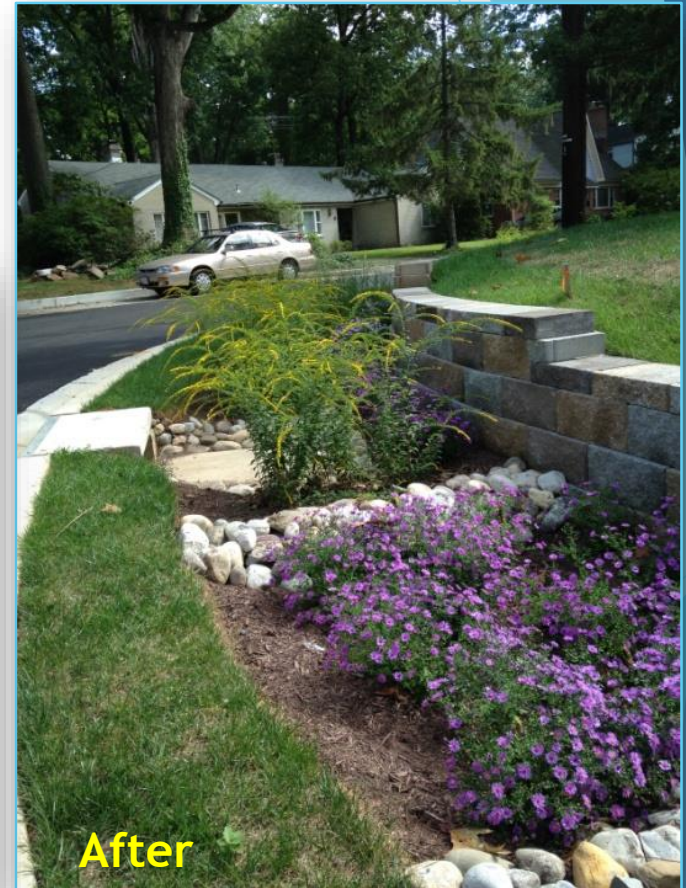
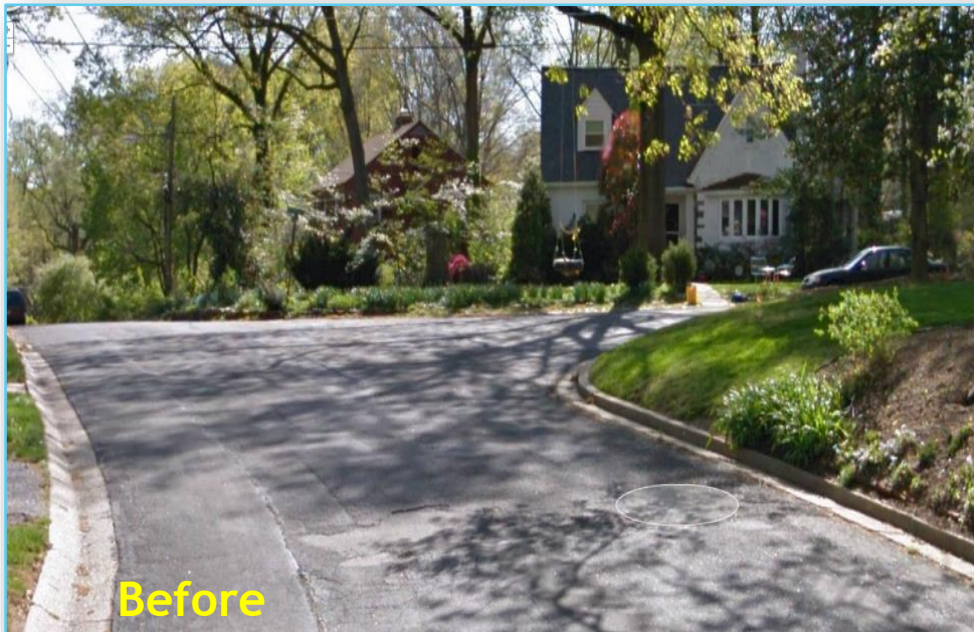


# Continued Commitment to Green Infrastructure

- ▶ Green infrastructure refers to environmental site design and other best management practices that typically use plants and soil media.
- ▶ On a larger scale, green Infrastructure is a patchwork of natural areas that provide habitat, flood protection, cleaner air and cleaner water.
- ▶ DEP considers wetland/wet pond retrofits and stream restoration projects as green infrastructure.
- ▶ DEP will be installing more ESD practices in future years:
  - ▶ In the total CIP Cycle for the approved FY13-FY18 CIP budget, \$80,950,000, was budgeted for ESD projects.
  - ▶ In the total CIP Cycle for the approved FY15-FY20 CIP budget, \$141,082,000, was budgeted for ESD projects.
- ▶ DEP continues to work with partners:
  - ▶ Consistent definition ( 3/1/2016)
  - ▶ Green Infrastructure Policy (3/1/2016)
  - ▶ Specific Pilot Projects

# Continued Commitment to Green Infrastructure

## Green Streets - Sligo Park Hills



**Bioretention and rain gardens within the green panel**



# Continued Commitment to Green Infrastructure

## Stormwater Management Pond Retrofits



Fallsberry Stormwater Management Pond in Potomac, Maryland



Treated = 13 impervious acres  
Completed - October 2014



# Stream Restoration



Breewood Stream Restoration Project near  
Wheaton, Maryland

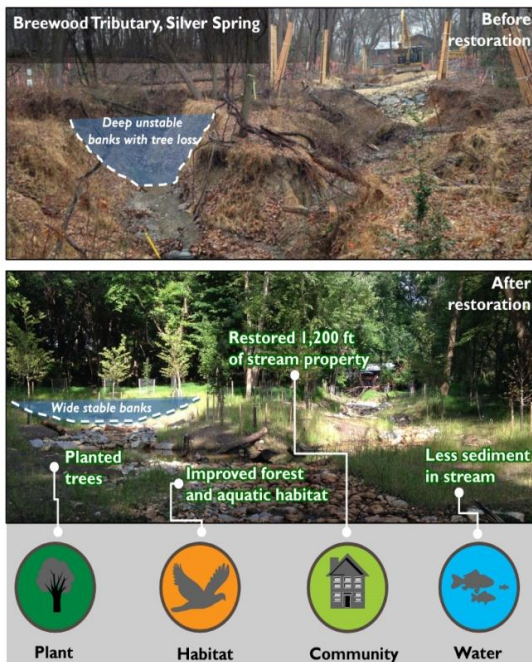
Length = 1,280 Feet  
Completed - 2015



# Continued Commitment to Green Infrastructure

## Clean Water, Green Communities

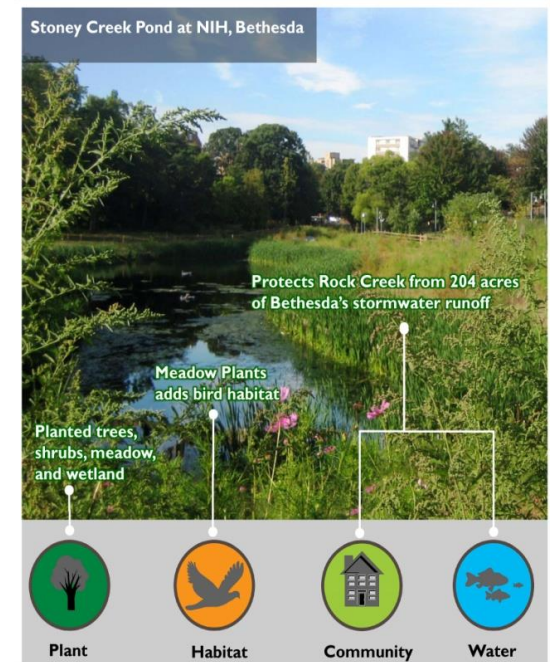
### Stream Restoration



### Green Streets



### Stormwater Ponds



# Moving Forward

## Use of a Public Private Partnership (P3)

- ▶ After evaluating the P3 in Prince George's County and Fort Meade, the County is considering the use of a P3 for green infrastructure implementation as part of the program to complete the next permit cycle.
- ▶ The goal of the P3 is to increase efficiency, provide for development of local businesses, and provide for alternative financing.

# Moving Forward

## Nutrient Trading

- ▶ Allows trading across sectors (point sources (WWTP), Ag, and stormwater to optimize the cost and efficiency of restoration
- ▶ Director Feldt is participating on a newly developed MDE nutrient trading task force to evaluate nutrient trading in the State.
- ▶ Anticipate nutrient trading to be part of next permit.

# Moving Forward

## MS4 Financial Assurance Plan

- ▶ SB 863 requires all Phase I jurisdictions to submit a financial assurance plan biannually to MDE proving that the jurisdiction can provide the funding to support the impervious restoration requirement of the MS4 permit.
- ▶ First report due July 1, 2016
- ▶ Requires public hearing and approval of Council
- ▶ The jurisdictions and MDE are working on details of how reporting will be completed



# Questions?